

What Is Claimed Is:

1. A diesel engine comprising:
a fuel injector which injects fuel into a cylinder; and
fuel injection control means for controlling the amount of fuel that is injected from this fuel injector and the timing of this fuel injection;
wherein said fuel injection control means perform an early-stage injection of a relatively small amount of fuel divided into a plurality of injections in the compression stroke, and perform a main injection of a relatively large amount of fuel after a specified period has elapsed following the completion of the early-stage injection, said early-stage injection is performed using a fuel injection amount and fuel injection timing which are such that the generation of heat caused by fuel of said early-stage injection occurs in the vicinity of compression top dead center, and said main injection is performed using a fuel injection amount and fuel injection timing which are such that the generation of heat caused by fuel of said main injection occurs after the generation of heat caused by fuel of said early-stage injection has been completed.
2. The diesel engine according to claim 1, wherein said fuel injection control means perform the initial injection of said early-stage injection at a timing after 80° BTDC and before 40° BTDC.
3. The diesel engine according to claim 1, wherein said injection control means perform said main injection after compression top dead center.
4. The diesel engine according to claim 2, wherein said injection control means perform said main injection after compression top dead center.

5. A fuel injection method for a diesel engine, wherein the early-stage injection of a relative small amount of fuel is performed divided into a plurality of injections during the compression stroke of the engine, a main injection of a relatively large amount of fuel is performed after a specified period has elapsed following the completion of the early-stage injection, said early-stage injection is performed using a fuel injection amount and fuel injection timing which are such that the generation of heat caused by fuel of said early-stage injection occurs in the vicinity of compression top dead center, and said main injection is performed using a fuel injection amount and fuel injection timing which are such that the generation of heat caused by fuel of said main injection occurs after the generation of heat caused by fuel of said early-stage injection has been completed.